

CLAIMS

1. A vehicle seat assembly (110) including;

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a passenger seat having a passenger seat member (26) and a passenger seat back (12), and

a child seat assembly (72) having a seating part (74) and a back rest part (76) and
10 having first and second child seat configurations,

wherein the passenger seat member (26) is movable between a first position in which the child seat assembly (72) is substantially hidden from view and a second position in which the child seat assembly (72) is exposed to enable the first child
15 seat configuration to be provided to seat a child passenger.

2. The vehicle seat assembly (110) as claimed in claim 1, wherein the child seat assembly (72) is removably mounted upon the passenger seat.

20 3. The vehicle seat assembly (110) as claimed in claim 1 or claim 2, wherein the seating part (74) is coupled to the back rest part (76) to allow interchange between the first and second child seat configurations through unfolding and folding of said parts (74, 76).

25 4. The vehicle seat assembly (110) as claimed in claim 3, wherein the back rest part (76) of the child seat assembly (172) is coupled to the seating part (74)

through a hinge arrangement.

5. The vehicle seat assembly (110) as claimed in any one of claims 1 to 4, wherein the passenger seat includes a seat base (18) defining an internal volume
5 (70) within which the child seat assembly (72) is accommodated, wherein the seat base (18) is provided with a seat base mount (78) and the child seat assembly (12) is provided with at least one child seat mount (80) for co-operation with said seat base mount (78) to enable mounting of the child seat assembly (72) thereon.
- 10 6. The vehicle seat assembly (110) as claimed in claim 5, including first and second child seat ISOFIX mounts (80) for co-operation with the seat base mount, wherein the seat base mount is a rear-side support bar (78) provided on the seat base (18).
- 15 7. The vehicle seat assembly (110) as claimed in claim 5 or claim 6, wherein the back rest part (76) of the child seat assembly (72) is provided with a releasable mounting means for co-operation with the passenger seat in a removable fashion.
- 20 8. The vehicle seat assembly (110) as claimed in any one of claims 5 to 7, further comprising a tray mounted within the internal volume (70) to provide a storage volume when the child seat assembly (72) is removed from the seat assembly (110).
- 25 9. The vehicle seat assembly (110) as claimed in claim 8, wherein the tray is removably mounted within the internal volume (70) .

10. The vehicle seat assembly (110) as claimed in any one of claims 1 to 9, wherein the passenger seat back (12) is provided with a movable section to define an opening for accommodating a child's legs and/or feet when the child passenger is seated in the child seat assembly (72).

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11. The vehicle seat assembly (110) as claimed in claim 10, wherein the movable section is removable completely from the passenger seat back (12).

12. The vehicle seat assembly (110) as claimed in any one of claims 1 to 11, including indication means (46, 48, 50) for providing an indication of whether the passenger seat member (26) is in the first or second position.

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13. The vehicle seat assembly (110) as claimed in claim 12, wherein the indication means includes a switch arrangement (48, 50).

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14. The vehicle seat assembly (110) as claimed in claim 13, including a push-type or on-off switch arrangement, wherein a first switch part (50) is mounted on a fixed part (18) of the passenger seat (110) and a second switch part (48) is mounted on the passenger seat member (26).

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15. The vehicle seat assembly (110) as claimed in claim 14, including a tilt-type switch arrangement.

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16. The vehicle seat assembly (110) as claimed in any one of claims 1 to 15, wherein the passenger seat forms a front passenger seat of a vehicle mounted adjacent to a vehicle driver's seat assembly, when in use.

17. The vehicle seat assembly (110) as claimed in any one of claims 1 to 16, wherein the child seat assembly includes means (84) for supporting a child's head to prevent unwanted lateral and/or angular movement thereof in the event of a side-vehicle impact.

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18. The vehicle seat assembly (110) as claimed in claim 17, wherein said supporting means includes a handle (84) of generally horse-shoe form to envelope the seat back part (76) of the child seat assembly (72) when in a handle-stowed position, said handle being movable into a carrying position to enable
10 convenient carrying of the child seat assembly (72) when it is removed from the seat assembly.

19. A portable child seat assembly (72) forming part of a vehicle seat assembly (110) as claimed in any one of claims 1 to 18.

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20. The portable child seat assembly (72) as claimed in claim 19, including a handle (84) which is movable between a stowed position and a carrying position.

21. The portable child seat assembly (72) as claimed in claim 20, wherein the
20 handle (84) is coupled with a membrane which is movable with the handle (84) so as to provide at least a partial cover for the child passenger when seated within the child seat assembly (72).

22. A portable child seat assembly (72) for interchangeable mounting within
25 (i) a vehicle seat assembly (110) as claimed in any one of claims 1 to 18 or (ii) a push-chair frame (100), wherein the child seat assembly (72) includes at least one ISOFIX mount (80) for co-operation with ISOFIX-compatible supports (78,102)

provided on the vehicle seat assembly (110) and/or push-chair frame (100).

23. A push-chair (100) including a push-chair frame and a child seat assembly (72) as claimed in claim 22, wherein the push-chair (100) includes the ISOFIX-compatible support (102) for co-operation with the ISOFIX mount (80) of the child seat assembly (72).

24. A vehicle having a front passenger seat assembly (110) and an airbag (56) provided on the front passenger side of the vehicle, wherein the front passenger seat assembly (110) is as claimed in any one of claims 12 to 18, the vehicle further comprising means (46, 52, 54) for automatically disabling the passenger airbag (56) in the event that said indication means provides an indication that the passenger seat member (26) is in the second seat position.

25. A vehicle seat assembly (10) providing first and second seat positions for a passenger and including;

a first seat member (26) and a seat back (12) defining a first seat surface (28) and a first back rest surface (14), respectively, for the passenger when in the first seat position, and

a second seat member (18) defining a second seat surface (20) for the passenger when in the second seat position, wherein the first seat member (26) is movable relative to the second seat member (18) to define a second back rest surface (30) for the passenger when in the second seat position.

26. The seat assembly (10) as claimed in claim 25, wherein the first seat member is a dual-sided seat member (26) having a first side defining the first seat surface (28) and an opposing side defining the second back rest surface (30).

5 27. The seat assembly (10) as claimed in claim 26, including pivot means for permitting the first seat member (26) to pivot relative to the second seat member (18) so as to permit the seat assembly (10) to be moved between the first and the second seat positions.

10 28. The seat assembly (10) as claimed in claim 27, wherein the pivot means includes a hinged arrangement.

29. The seat assembly (10) as claimed in claim 25, wherein the first seat member (26) is translatable relative to the second seat member (18).

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30. The seat assembly (10) as claimed in claim 29, wherein the first seat surface and the second back rest surface are defined by the same surface of the first seat member (26).

20 31. The seat assembly (10) as claimed in any one of claims 25 to 30, including indication means (46, 48; 50) for providing an indication of whether the seat assembly (10) is in the first or the second seat position.

25 32. The seat assembly (10) as claimed in claim 31, wherein the indication means includes a switch arrangement (46, 48, 50).

33. The seat assembly (10) as claimed in claim 32, wherein the switch

arrangement is a latch arrangement including a first latch member (48) mounted on the first seat member (26) and co-operable with a second latch member (50) mounted on the second seat member (18) whereby the first latch member (48) engages or otherwise co-operates with the second latch member (50) when the
5 seat assembly (10) provides the first seat position the latch members (48, 50) are caused to disengage when the seat assembly (10) provides the second seat position.

34. The seat assembly (10) as claimed in claim 33, wherein the latch
10 arrangement is an electrical latch means (46, 48, 50), configured such that when the first seat member (26) is inclined relative to the second seat member (18) to define the second seat position an electrical connection is broken, said electrical connection being re-established when the first seat position is adopted and said first and second latch members (48, 50) are caused to engage or otherwise co-
15 operate.

35. The seat assembly (10) as claimed in any one of claims 25 to 34, wherein the first seat member (26) forms a part of a front seat assembly (10) of a vehicle for mounting adjacent to a vehicle driver's seat assembly, in use.
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36. The seat assembly (10) as claimed in any one of claims 25 to 35, wherein the first seat position is that adopted for an adult passenger, and the second seat position is that adopted for a child passenger so that the seat assembly (10) has an integrated child seat in which the second seat surface (20) defines a child seating
25 surface and the second back rest surface (30) defines a child back rest surface.

37. The seat assembly (10) as claimed in any one of claims 25 to 36, wherein the seat back (12) is arranged to be moveable between a generally upright position and a reclined position, whereby when in the reclined position the seat assembly (10) provides the second seat position for the passenger and the first
5 back rest surface (14) defines a support surface for the passenger's legs.

38. The seat assembly (10) as claimed in claim 37, wherein the seat back (12) includes additional pivot means (36) for permitting pivotal movement of the seat back (12) relative to the first seat member (26) so as to permit the first seat back
10 surface (14) to move into the reclined position.

39. The seat assembly (10) as claimed in claim 38, wherein the seat back (12) is foldable and/or collapsible.

15 40. The seat assembly (10) as claimed in any one of claims 25 to 39, wherein the second seat surface (30) is hidden from view when the seat assembly provides the first seat position.

41. The seat assembly (10) as claimed in claim 40, wherein the second seat
20 member is a base (18) of the seat assembly (10).

42. The seat assembly (10) as claimed in any one of claims 25 to 41, further comprising harness means (38, 40) for harnessing the child passenger in the second seat position.

43. The seat assembly (10) as claimed in any one of claims 25 to 42, further comprising adjustment means (36) for adjusting the angle of inclination of at least one of the first and second back rest surfaces (14, 30).

5 44. A vehicle having a passenger's seat assembly (10) and a passenger airbag (56) provided on a passenger side of the vehicle, wherein the passenger's seat assembly (10) is as claimed in any one of claims 31 to 43, the vehicle further comprising means (52) for automatically disabling the passenger airbag (56) in the event that the indication means (46, 48, 50) provides an indication that the
10 second seat position is provided.